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Chertoff makes first Lab visit

By Don Johnston
NEWSLINE STAFF WRITER

U.S. Department of Homeland Security Secretary Michael Chertoff extolled the capabilities the Laboratory brings to bear in the war on terrorism during his first visit to Livermore Wednesday.

Chertoff called the Laboratory a “tremendous national resource” that has a lot to “offer us in terms of enhancing our homeland security.”

“When you spend some time at the Lab, you see the enormous capabilities we bring to bear on some of the challenging threats the country faces from potential terrorist acts,” he told members of the news media. “We’re very concerned about nuclear threats, for example. We’re focused on developing next generation detection equipment.”

Chertoff spoke outside the Interagency Modeling and Atmospheric Assessment Center in

See **CHERTOFF**, page 5



JACQUELINE MCBRIDE/NEWSLINE

From left: Allen Christian of LLNL explains the bio briefcase detection technology to Scott Weber of the U.S. Department of Homeland Security, Department of Homeland Security Secretary Michael Chertoff, and Laboratory Director Michael Anastasio.

See more visit photos,
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The Amazon River basin forests take and hold less carbon dioxide than scientists previously believed

By Anne M. Stark
NEWSLINE STAFF WRITER

The Amazon River basin isn’t taking up and holding as much carbon dioxide as once believed.

In fact, the 2.4 million-square-mile Amazon River basin — where tropical forests rapidly suck up carbon dioxide during photosynthesis — is only storing the gulped carbon for about five years in the trees, other plants and soils of the surrounding basin landscape.

Tom Brown of the Lab’s Center for Accelerator Mass Spectrometry (CAMS) along with researchers from the University of Washington, the Stroud Water Research Center, Rice University and University of São Paulo, Brazil, report their findings in the July 28 issue of the journal *Nature*.

Hopes were that tropical forest regions, such as the huge Amazon basin, stored carbon for decades or even centuries and served as a much longer-term location for the sequestering of atmospheric carbon dioxide, the human-produced greenhouse gas.

Previous measurements in the downstream sections of the Amazon basin indicated the carbon in the rivers was from 40 to more than 1,000 years old. However, the researchers’ recent radiocarbon measurements of dissolved inorganic carbon and organic carbon across the Amazon basin tell a different story.

“From the results of the largest radiocarbon survey ever for a single watershed, we showed

See **AMAZON**, page 8

Aurora concludes first step towards Lab’s vision 2005

Participants in the Aurora Project concluded two days of meetings late Thursday evening to discuss, perfect and prioritize initiatives proposed by five teams for moving the Laboratory toward a 2025 vision.

Director Michael Anastasio called the offsite the “end of the beginning” for Aurora. “Our purpose over these two days was to learn about the proposed initiatives, discuss them, constructively critique and rank them,” Anastasio said. “This process is instrumental in determining



See **AURORA**, page 8

Firefighters lauded for Tesla fire efforts

While the embers were still smoking at last week’s Tesla grass fire that encroached on Site 300, a rough estimate of the flames’ penetration was a couple of hundred acres.

Now that the fire has been extinguished, some Site 300 personnel have shifted from recovery efforts to recalculating the fire’s penetration. Part of the challenge was distinguishing which grasslands were burned by the Tesla fire, and which had already been blackened by the controlled burn earlier this fire season.

The acreage attributed to the Tesla blaze has been re-estimated at nearly 2,000 acres. But the most important statistics remain unchanged: No injuries, no loss of livestock or Site 300 structures. The only structures

burnt were two derelict out-buildings on adjacent ranch lands.

Bill Bookless, associate director for Safety and Environmental Protection, said the well-coordinated actions of firefighters minimized property damage and ensured the safety of Site 300 employees.

“I want to especially compliment the Laboratory’s firefighters for their highly skilled and professional response to the fire situation. Their planning and the actions taken to stop the fire assured that Laboratory facilities and personnel were well protected. I also want to thank the many firefighters from other jurisdictions who responded to the mutual aid call and provided fire protection assistance.”

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of HOME
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campaign to
kick off
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LAB COMMUNITY NEWS

Weekly Calendar

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Monday
1

Today is the deadline for submitting graduate and undergraduate **academic plans**. EODD processes requests for funding of degree programs on a quarterly basis. Review and approvals are done quarterly, rather than monthly, by the Student Policy Committee. All requests should be sent to the Education Office, L-728. Requesters will be notified following the Student Policy Committee meeting scheduled for the first Thursday of the following month. For additional information, contact the Education Office, 4-5479.

Up
&
Coming

A **Lab blood drive** will be held Aug. 8-11 in Trailer 4675 (the old central cafeteria). Donors are encouraged to schedule an appointment in advance at <http://www.beadonor.com/> and click on the word “registration.” The drive sponsor code is: “LLNL.” Individuals without Internet access can schedule an appointment by calling the LLESA Office at 2-9402. The goal of the Red Cross staff is to complete the donation process for pre-scheduled appointments in 60 minutes or less. If your schedule does not allow you to make an appointment, the staff will work you into the schedule, as time permits, after the first hour of each drive day. Donor eligibility questions should be directed to the American Red Cross at (510) 594-5143.

...

The Lab will present “**Science in the Movies**,” on Tuesday, Aug. 9, at 2-3 p.m. and 7-8 p.m. at the Amador Theater in Pleasanton. The presentation offers a behind-the-scenes look at how science plays a part in TV and film special effects and stunts. (See story at right for details.)

...

The next **Leadership Lecture Series** “Six Stages of Power: Transforming Yourself and Your Organization in the Face of Change” will be presented by Delorese Ambrose, Thursday, Aug. 11 from 9:30-11:30 a.m. in the Bldg. 123 auditorium. Ambrose will explore externally and internally driven changes many organizations face. Using a six-stage model of power, she will discuss implications for personal and organizational renewal. The lecture is open to all employees. Pre-registration is requested. To enroll, go to: http://www-r.llnl.gov/human_resources/sedd/eodd/event_lecture_ambrose_reg.html

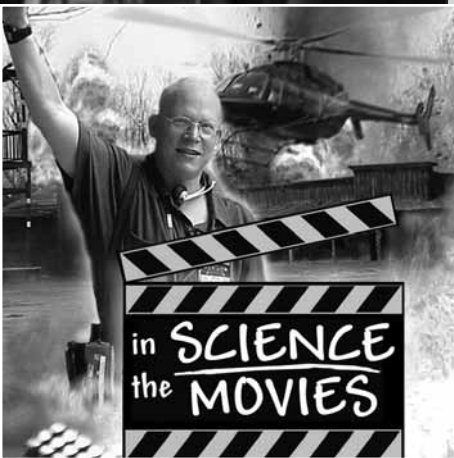
‘Science in the Movies’



Ever wonder how movie stuntmen stay safe when they are on fire, crashing through windows, or jumping from buildings? Do you know how science is used to help solve the challenges of movie-making?

Veteran special effects coordinator, Steve Wolf (shown in photos), shows you how in “Science in the Movies,” a lively one-hour stage demonstration of some of the “behind the scenes” wizardry used to create the spectacular stunts and feats seen in movies and on television.

“Science in the Movies” will be presented at the Amador Theater in Pleasanton on Tuesday, August 9. Showtimes are 2-3 p.m. and 7-8 p.m. Seating is on a first come, first served basis. Admission is free and families are welcome. For more information go to <http://www.llnl.gov/llnl/community/events.jsp>, or call 925-422-4599.



IN MEMORIAM

Eugene H. Canfield

Gene Canfield, a 38-year veteran of LLNL, died on June 10. He was 81.

Born and raised in Texas, Canfield settled in the Bay Area in 1946, after serving as a cryptographer in the U.S. Army during World War II. He received a bachelor’s degree in engineering from Texas A&M and a doctorate in nuclear physics from UC Berkeley, where Edward Teller was his thesis advisor.

Canfield worked on a variety of assignments. Among them were the nuclear ramjet project, PLUTO, in the 50s and 60s, and the Theoretical Physics Division T Division in the 70s and 80s. His expertise was in neutron transport theory, with special emphasis on Monte Carlo techniques.

Canfield enjoyed sharing his knowledge with colleagues. He also enjoyed bridge, intelligent conversation, puns, palindromes, chess, complicated math problems and puzzles.

He is survived by his wife Elisabeth; daughter Catherine; son Christopher; grandchildren

Emily, Dylan, Meigan, and Leah; and many friends.

Newsline

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NEWS OF NOTE



Laboratory Personnel and Procedures Manual updated

The *Personnel Policy and Procedures Manual* will undergo some changes in order to better reflect current law. The changes were announced via memo to senior managers from Jan Tulk, associate director of Administration and Human Resources, last week.

The changes, which do not require employee comment, also include new UC policies on upper management. The changes include:

Section F—Records

Revisions include the addition of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). HIPAA mandates standards to protect and guard against the misuse of individually identifiable health information.

Section B—Recruitment—Physical Exams

Section B, III.7. Physical Examination has been updated to clarify supervisory responsibility for ensuring new employees obtain required health evaluations.

Section G—Benefits—Return-to-Work Clearances

Sections that reference return-to-work

UC proposes extension of supplement to military pay

Under current University policy, eligible employees who are on active military duty may receive supplemental payments from the Laboratory to their military salaries, and a continuation of their UC health-plan benefits.

The current program has been extended to Aug. 31, 2005. Because it is the University's continuing desire to assist employees called to active military duty during current and related campaigns, the University is proposing to extend its policy until June 30, 2006, with revisions.

Information about the proposed policy may be found here (http://www-r.llnl.gov/human_resources/hrsvcs/policy-docs.html#wb). Comment on proposed changes by Aug. 19, 2005, to Tish Rzeszutko of the Office of HR Planning & Policy (rzeszutko2@llnl.gov).

clearance requirements now reflect current requirements in the *ES&H Manual*. Employees are now required to report to Health Services after any lost work day related to occupational illness or injury. Sections affected include III.7. Return to Work Following Sick Leave, VII.3 Personal Leave Without Pay, VII.4. Pregnancy Disability Leave, VII.5. Family and Medical Leave, and VII.6 Leave Without Pay for Temporary

Workers' Compensation.

Section G—Benefits—Military Leave

Section G, V.2.c. Extended Military Leave, has been updated to comply with the Uniformed Services Employment and Reemployment Rights Act (USERRA), allowing for exceptions to the five-year maximum.

New Policies for At Will Upper Management Personnel

A number of management positions have been designated as upper management personnel, serving at the discretion of the Lab director. Two new policies covering these positions have been developed by the University, the Policy on "At Will Upper Management Personnel and Resolution of Concerns

for At Will Upper Management Personnel." The relevant LLNL Personnel Policies and Procedures have been updated to reflect these changes.

The full text of these policies is available on the Web at http://www-r.llnl.gov/human_resources/RED/pppm/Introduction.htm. For more information, contact Tish Rzeszutko in the Office of HR Planning and Policy, 2-6597, or rzeszutko2@llnl.gov.

Lab employees lend a hand for HOME improvement

On July 23, approximately 50 Laboratory employees — engineers, physicists, managers, computer programmers, secretaries, coordinators, summer students, and retirees — worked in 106+ degree weather to help build homes in Livermore, working with Habitat for Humanity as part of the Lab's HOME campaign, sponsored this year by Defense and Nuclear Technologies (DNT).

"We had a successful day and completed all projects safely," Dawn DaRonco of DNT said. "Lab employees spent a day at 'HOME' in their community as a great example to all."

Workers started at 8:30 a.m. and finished around 4:30 p.m., completing various projects including painting interior walls, and cleaning windows and interiors in preparation for flooring. Some of the more physical and sun-soaked jobs included pressure washing the curbs in preparation for red zone painting, building fences, using a pick-ax to break up dirt then mixing cement by hand, and using an auger to drill holes for fence posts.

Photos of the "Habitat for Humanity, All LLNL day" will be posted on the HOME Campaign Website soon.

There will be an "At HOME in our Community" project each month leading up to the HOME Run on Wednesday, Oct. 12. Future projects include: collecting backpacks and supplies for children going back to school (August); assisting local veterans (September); helping with animal rescue organizations (October); and feeding the homeless (November). Check *Newsline* for more details about upcoming events.



PHOTOS BY DAWN DARONCO AND LINDA NULL

Patti Lann, above, of Defense and Nuclear Technologies (DNT) and this year's HOME Campaign chairperson, gets ready to work at the "All LLNL" day with East Bay Habitat for Humanity. Don DaRonco, inset, of Plant Engineering, puts his painting skills to the test inside one of the houses.

HOME supports Tri-Valley Jubilee's 'back-2-school giveaway' drive

To gain a better understanding of the work done by agencies registered with HOME (Helping Others More Effectively), the HOME Campaign Committee is supporting a series of activities called "LLNL at HOME in our Community."

During the first three weeks of August the committee will be collecting items for the "Back-2-School Giveaway" sponsored by Tri-Valley Jubilee in Livermore.

Donation stations are located in Bldg. 132N lobby, Bldg. 361 lobby, Bldg. 571 south entrance, and Site 300, Bldg. 871.

Items needed include pencils, pens, markers, crayons, glue sticks, backpacks, binders, paper, rulers, calculators, gift certificates for shoes, and gift certificates for haircuts. Donations should be made by Tuesday, Aug. 16.

For more information, contact Chelle Clements at 3-8134 or clements3@llnl.gov.



NEWS YOU CAN USE

Students: remember these poster symposium dates



Aug. 1

The Student Poster Symposium registration deadline is close of business, Aug. 1. Register on-line @ [http:// education .llnl.gov/symposium/](http://education.llnl.gov/symposium/).

Aug. 10, 11

The Student Poster Symposium will be held Aug. 10 and 11 in the Central Café, 3 -5 p.m.



Summer Student Calendar

Seminars, panels and other activities are in full swing for summer student employees. Go to the Student Bulletin Board at <http://education.llnl.gov/sbb/> for details and to register for events.

**Monday
1**

NIF tour: 1:15, Bldg. 581, Contact: Laura O'Brien, 2-7295.

MARA Site 300 tour: 9 a.m., Bldg. 801. Presenter: Gordon Krauter, Scientific B Division. Contact: Debbie Pastore, 3-5238.

**Tuesday
2**

Seminar: "Post Bachelors Degree Decision Making," by Donn McMahon, Suzanne Monaco and Mohammad Dehghani, LLNL. 3-4:30 p.m. Bldg. 482 auditorium, Contact: Maureen Lewis, 2-2626.

ICMT seminar: "Meshing Methods and Software Integration," by Lori Diachin, CASC. 2:30 p.m., Bldg. 219, room 163. Contact: Tiffany Ashworth, 4-3491.

NIF tour: 8:45 a.m. Bldg. 581. Contact: Laura O'Brien, 2-7295.

**Wednesday
3**

DHS seminar: "Computational Design of Pathogen DNS Signatures," by Tom Slezak, Computation Directorate, CAR, E&E, BBRP, Institutional Comp Applications. Noon-2 p.m. Bldg. 132S, room 1755. Contact: Barry Goldman, 2-5177.

ICST seminar: "Babel/CCA," by Tom Eperly, CASC. 2:30 p.m. Bldg. 219, room 163. Contact: Tiffany Ashworth, 4-3491.

Brown-bag lunch/discussion: Steve Patterson, associate director for Engineering, LLNL. Noon-1 p.m., Bldg. 141, Shannon Room. Contact Gina Boegel, 3-4336.

**Thursday
4**

NIF tour: 9:45-11:15 a.m., Bldg. 581. Contact: Laura O'Brien, 2-7295.

Sandia summer intern symposium: Sandia summer interns. Tentative 8 a.m.-3 p.m., Bldg. 940, MANTL. Contact Jan Bachman, 294-4660.

UC Berkeley campus tour: 8:30 a.m.-2 p.m. Buses will pick up students in front of Bldg. 361, Biosciences Directorate. Contact: Jackie Zamora, 4-3178.

Seminar: "Technology Transfer: The Business End of Science," by Alyssa Thomas. 3-4:30 p.m., Bldg. 543 auditorium. Contact: Alyssa Thomas, 3-0587.

Technical Meeting Calendar

**Friday
29**

CMS ASSOCIATE DIRECTOR FRONTIERS IN CHEMISTRY AND MATERIALS SCIENCE SERIES

"Academic and National Security Research at the Lujan Neutron Scattering Center at LANSCE," by Alan J. Hurd, Director, Lujan Neutron Scattering Center at LANSCE, Los Alamos National Laboratory. 3:30 p.m., Bldg. 155, auditorium. Contacts: Mike Fluss, 3-6665, or Dawn Brosnan, 4-5008.

ELECTRONICS ENGINEERING TECHNOLOGIES DIVISION (EETD)

"Treatment of Uncertainties in Engineering Mechanics," by Phaeton Koutsourelakis. 10-11 a.m., Bldg. 141, room 1104, Nyquist Room. Common use facility. Foreign nationals may attend. Contact: Lee Glascoe, 3-2922.

CENTER FOR BIOTECHNOLOGY, BIOPHYSICAL SCIENCES AND BIOENGINEERING (CBBB)/BIOSECURITY & NANOSCIENCES LABORATORY (BSNL) SPECIAL SEMINAR

"New Approaches to Oligonucleotide Sensing Using Electrostatics," by Lewis Rothberg, Department of Chemistry,

University of Rochester, Rochester, NY. 11 a.m., Bldg. 151, room 1209, Stevenson Room. Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Thomas Huser, 3-6952, or Beverly Zumwalt, 2-7535.

**Monday
1**

CHEMISTRY & MATERIALS SCIENCE

"Ion Mobility: Technology behind a Recent R&D Award," by Henry Benner, Bio-Mass Spectroscopy Group, CBN Division. 2 p.m., Bldg. 151, room 1209 Stevenson Room. Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Ted Tarasow, 3-7241, or Kathy Ricard, 3-8024.

CENTER FOR APPLICATIONS DEVELOPMENT & SOFTWARE ENGINEERING (CADSE)/ INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH (ISCR)

"Using the North Carolina Multi-Hazard Threat Database for Homeland Defense," by David L. Wray, North Carolina Department of Agriculture & Consumer Services. 10 a.m., Bldg. 451, room 1025, White Room. For more information, see URL <http://www.llnl.gov/casc/calendar.shtml>. Property protection area.

Foreign national temporary escorted building access procedures apply. Contact: Steve Smith (CADSE), 3-8958, or Erica Dannenberg, 3-2167.

**Thursday
4**

CENTER FOR APPLIED SCIENTIFIC COMPUTING (CASC)/INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH (ISCR)

"Wavelets and Web-Services (W2) for On-Line Scientific Data Analysis," by Cyrus Shahabi, University of Southern California. 10 a.m., Bldg. 451, room 1025, White Room. For more information, see URL (<http://www.llnl.gov/casc/calendar.shtml>) Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Ghaleb Abdulla (CASC), 3-5947, or Erica Dannenberg, 3-2167.

The deadline for the next Technical Meeting Calendar is noon Wednesday.

Please submit your meetings via the new Technical Meeting Calendar form on the Web, located at <http://wwwr.llnl.gov/tmc/index.html>



From top left:

Director Michael Anastasio (left) introduces Secretary Chertoff to start the press conference Wednesday.

Lab researcher Mark Dietrich is interviewed by television news reporter Manny Ramos about the handheld RadScout detection instrument for identifying radioactive material.

Anastasio and Chertoff inspect the Lab-designed homeland security van.

Anastasio, Chertoff and Maureen McCarthy of the Department of Homeland Security talk to students interning at the Lab through a DHS summer program.

Anastasio and Chertoff speak with student interns and Laboratory scientists after a demonstration of Lab homeland security detection technologies in Bldg. 170.



CHERTOFF

Continued from page 1

Bldg. 170 against a backdrop including the Lab-designed Department of Homeland Security Mobile Van, which contains state-of-the-art radiation detectors and an explosives detection system.

The Laboratory's scientific and engineering expertise is helping to make existing detection systems "smaller, cheaper, more effective and more precise," Chertoff said, noting the Lab is also making important contributions to systems addressing biological threats.

"The systems science and engineering skills this lab brings to bear on detection problems are precisely what this country needs to get real-time detection of biological hazards that give us the capability to respond immediately after an attack," he said.

Turning to the problem of infrastructure challenges such as mass transit, Chertoff said, "The ability of the national labs to analyze vulnerabilities has been an enormous help to local transit authorities in identifying where they have to focus their efforts in preventing potentially high consequence attacks on their transit systems."

Chertoff emphasized that the department's approach is to work in partnership with local authorities — "who know their system best" — to bring the technology and systems engineering that will "enhance the security for millions of passengers riding rapid transit systems."

"I look forward to working with the labs and the private sector as we face what is going to be a long-term challenge, which is protecting the country from the terrorist threat in a way that is efficient, allows us to live our way of life, doesn't intrude on our privacy and civil liberties, but gives us the kind of security every American has the right to expect," Chertoff said.

Responding to questions about funding, Chertoff said the Department of Homeland Security takes a "risk based" approach, identifying and addressing "high consequence vulnerabilities."

"We always want to be risk based looking at the trilogy of consequence, vulnerability and threat," he said. "We want to move to a risk-based system — and that's not a system that looks at political jurisdictions — it's a system that looks at where the threat is and

where the vulnerabilities are. That's the kind of system that will make sure we target where we need to protect our population, our infrastructure and our economy."

Asked about the vulnerability of the Bay Area with its wealth of national icons and high technology centers, Chertoff said, "We've made a lot of progress since 9/11 in strengthening our defense against terrorism, first of all by increasing our intelligence. We're much better at intelligence sharing and we have better intelligence to share. We work with local officials to better protect infrastructure and we've made a lot of progress in the last three to four years. We've also worked on preparedness in terms of how you respond and mitigate the damage if there's an attack."

Though recent terrorist attacks have used conventional explosives or "low tech" methods, Chertoff said it is important to anticipate the evolution of threats in the future, noting that no one anticipated the use of commercial airplanes as weapons before Sept. 11. "We're going to continue to focus on conventional threats," he said. "But we have to be careful not to let what happened last week or three weeks ago beguile us into failing to look at things that could happen in the future that could have even more catastrophic consequences."

In introducing Chertoff to the media, Director Michael Anastasio said, "We have been showing the secretary how we at Lawrence Livermore and Sandia National Laboratory are working aggressively to assist the Department of Homeland Security in winning the war on terrorism."

"Our work in homeland security has grown considerably in recent years and this builds on work we have been doing for more than a decade that addresses issues of terrorism," Anastasio said. "The Lab is committed to bring to bear its science and technology capabilities to help the country understand the threats it may be facing, innovate systems solutions to address those threats and deliver real products to first responders in the field."



*Photos by
Jacqueline McBride
Newsline*

Members of the media were able to get a first hand look at some of those Lab technologies displayed in Bldg. 170 prior to the secretary's press conference. After talking to the media, Chertoff also viewed the detection systems on display and spoke with researchers and Department of Homeland Security interns working at the Lab this summer on homeland security projects.

Under the theme "Actionable Information to Enhance Preparedness," Chertoff received briefings on a broad range of Laboratory research projects related to national and homeland security from directorate and program leaders including Ray Juzaitis, associate director for Nonproliferation, Arms Control and International Security, Melanie Elder, Pat Fitch and Bill Colston.



CLASSIFIED ADS

See complete classified ad listings at

<https://www-ais.llnl.gov/newsline/ads/>

AUTOMOBILES

2002 - Jeep Gr Cherokee Ltd, V8,AC, pwr,10-CD changer, leather,sunrf,45Kmi, Excel Cond. Bmpr2Bmpr \$0 ded warr incl. \$20K. 209-833-1201

1985 - Corvette, white with dark grey interior. 45,000 original miles, 2nd owner. \$10,000.00 925-516-2174

1990 - Cadillac, Sedan Deville, Off white beautiful, a land yacht. 133K miles, New tires & battery, registration paid to 7/06. \$2000.00 209-823-5593

1996 - White Jetta GL, 4 door, 120K, good AC, cd player, power locks, 5 speed. \$2300.00 209-814-9020

1996 - MAZDA MIATA, M-EDITION, manual trans., AM/FM/CD, 15in. alloy whls, cc, leather seats, dark blue, 22K miles, \$6,200. 925-447-1126

1999 - Honda Civic SI coupe V-tec, 32-34mpg hwy great comut. car! 1987 Honda CRX SI, 30-33mpg hwy! Jon(209)679-4943 209-848-1138

2001 - Ford Escape XLT Mini SU 4WD V6 3.0, Good gas, Excellent Cond., Air, Pwr, Rack, Tint, Tow, 121K MI, KBB VALUE 10K, \$9800 OBO 209-499-3793

2001 - FORD ESCAPE, White with gray interior. Excellent condition. One owner. 60,000 miles. \$10,800 925-455-0515

1993 - BMW 325i, blk/blk, 5-spd, original owner, 165K mi., runs and looks great. 925-828-0893

AUTOMOBILE ACCESSORIES

15 inch TIRES: Two 235/75/15 good tread, one mounted on 6 bolt rim \$25/ both. Livermore 925-447-7070

Ford 352-2v engine and automatic transmission, original, runs good. Hear it run in stand and see transmission go into gear. \$250. 925-455-8302

White camper shell fits long bed Ford F250 or like. Excellent condition. \$150 OBO 925-875-1040

BICYCLES

Singlespeed Mountain Bike. 18in steel frame. Geared 2:1. Suitable for 5.5-6 foot tall rider. Try it -- make the routine a challenge. \$350.00 obo. 925-455-6785

CoPilot Tandem Trailer, Sturdy Bike extention for bike riding with the kids(5-10yrs)and not have to worry about them rid-

ing their own bike \$25.00 928-872-6447

BOATS

Zodiac Mark 2 GT 14ft inflatable,Bimini Top.Alum removable floor boards, tie downs rails and straps,15hp Johnson,launch wheels.like new \$2000 925-449-1340

CAMERAS

Old Cameras/Projector - FREE! Nikon FG 35mm camera. Sony 8mm Handycam video. Kodak 850H 35mm projector. All need repairs. 925-449-4003

ELECTRONIC EQUIPMENT

New palmsize hi-res video-camera/ digital camera/MP3 player. Record DVD quality video on SD memorycard. Playback on TV/computer, sacrifice for \$289 415-543-3643

VCR. Sanyo,4head,remote,like new! \$25 925-980-7532

Playstation1, 2controllers and 16games-Croc2, Chess, Spyro1&2, HPotter, Bugslife, Toystory, Pacman, Frogger, Chickenrun, others \$125 209-581-9975

PowerMac G5, new never used, 1.8 GHz with 1.5 GB (1 GB upgrade) Superdrive (DVD-R/CD/RW), new Lexmark printer \$1,500. 20-inch Apple Monitor \$800. 415-377-5361

GIVEAWAY

ClutterLess(CL) Self Help Group. Clutter stressing you out? Mondays 7-8:30 PM. Come: Pleasanton Presbyterian, Rm 7, 4300 Mirador Drive, or call 925-426-5311

Mirror closet doors each 36X87 inch. Both sets in good condition with hardware. Use for closets or as 4 large mirrors. Livermore. 925-449-6048

Free to good home. Affectionate Macrel Tabby. 8 yrs old. Hate to part with her but can no longer keep. 925-294-8469

HOUSEHOLD

Lazyboy queen sofa sleeper, blue, \$150.00 Twin mattress, boxspring, and frame, \$75.00 Two twin mattresses, \$40.00 each. Oak dining table, \$100.00. 925-447-2068

Mitsubishi 35-inch tube TV console with walnut cabinet, picture-in-picture, cable-ready tuner, top-of-the-line unit, fantastic picture. \$175 415-543-3643

Wood Computer Armoire w/file drawer, dbl bifold

drs,2shlves(1 sliding),extding keybrd try 150.00,or B.O. 9X10 Shed w/selves(beige)\$200.00 or B.O. 925-872-6447

CARDBOARD BOXES, STURDY for moving/storage, folded flat for easy loading: 40 for \$50 925-447-7070

Beveled Oak Mirror, (34x22) 8 sides, medium brown stain, excellent condition. \$65.00 925-447-9647

Canning jars, various sizes. \$10.00. If interested, will bring to work. 510-582-2938

Dryer. Westinghouse,heavy duty,electric, off white. Good condition. \$45 925-980-7532

Moving Sale on July 30,9-2pm, Aug.5&6, 8-2pm Furniture & Household items 1637 Calle Santa Anna,Pleasanton. 925-462-1899

Formal dining room set-table w/leaf and 6 chairs (2 captain, 4 regular); lighted china cabinet. Honey colored wood. \$400/set. 925-454-1881

Bed, extra length twin box spring mattress and frame on wheels, great for the tall student going off to college \$25 925-447-6221

Tappan Upright Frostless Freezer upright with key lock-great condition U-haul \$200.00 925-443-3259

Window Air Cond. 12,000 BTU-good for large room. used 3-summers, stored winters, excell cond. 120-VAC. \$125 obo 925-785-9466

European Style Coffee table, end tables, glass tops, \$100. Baby bike seat with attachments, not used \$45 OBO. New Battery charger \$10 925-245-1414

LOST & FOUND

BMX style Redline bike removed from the B132S Loading dock area. Please return the bike, it is NOT lab property. 209-933-9570

MISCELLANEOUS

Industrial Minor Saw, good for detail. Hardly used. Excellent quality. If interested, will bring to work, 50.00 OBO 510-582-2938

2 Green Day tickets. Sat., Sep. 24, 7pm. SBC Park, seats. Jimmy Eat World opening. \$111, firm. 925-321-1617

Roho wheelchair high profile cushions. Model 1R109C. Fits 18-19 width x 16-17 depth. One brand new \$250.00 (retail \$425). One barely used \$125. 925-998-2620

Southwest Airlines ticket anywhere Southwest flies. Flight

must be completed by 8/24/05. Value \$72.10, sell for \$30.00 925-998-2620

Oakland A`s vs Kansas City Fri 8/19 or Sat 8/20 aisle seats 3rd base line MVP Sec 125 Row 13 Seats 1&2 \$30/seat 925-449-5481

Collectible Jim Beam Liquor Cars. Lots of different models to choose from. \$25.00 925-462-4927

Welding Table: 4ft x 6ft x 3/4in thick top. 2in square tube frame. \$200.00. 925-455-1730

Two Radio Shack exterior speakers \$10.00 925-447-5459

Nice kitchen table with four chairs.Very good condition. Includes one leaf. \$60.00 510-886-6587

New 2005 Medela Advanced Pump in Style breastpump (tote bag style) for sale (retails \$320). Asking \$225/OBO. 925-876-5188 925-876-5188

Moving boxes. U-Haul brand. Quite new,different sizes. \$25 for all! 925-980-7532

Generator - Coleman Power Pulse 1850, 1,500 watts continuous 110 volt power, less than 40 hours used. Asking \$425. 925-606-6533

Garage Sale - Saturday, July 30 9am-2pm 1764 Peary Way, Livermore - Pregnancy clothes, computer, books, movies, cds, golf clubs, furniture. 925-455-4852

Sofa Table. Glass top, wood legs. Very stylish. LIKE NEW, only used for 6 mo. Ashley Axiom model T251-4. Can send pic. New \$240. Asking \$100 obo. 925-784-6682

Stroller, Peg Perego Venezia top of the line, like new, used only 2 weeks, Paid over \$300, sell for \$140 OBO. 925-245-1414

Marine pressure treated wood floating boat docks, Two 4x20, excellent condition \$300 each or \$500 for both. You pick up in Auburn 925-449-1340

MOTORCYCLES

1992 - Yamaha Seca II, 600cc inline 4 cyl, 34K mi, runs strong, time for some work, \$1100. Call 510-252-9596

1987 - Honda Odysee (Dune Buggy), 250cc, 2 cyc engine. 18 inch wheels, Runs fast and perfect. \$1300 OBO. Will throw in trailer for another \$400. 209-612-0231

1999 - HD Sportster w many upgrades. Forward controls, wideglide front end, chrome, etc. Recent service. \$6,000 925-606-8763

MUSIC INSTRUMENTS

Ride cymbal. Bosphorous brand, 20inch, gold series, hand hammered,heavy ride. Quite new! \$200 925-980-7532

Paul Reed Smith (Santana guitar!)CE 3 American made. Royal blue transparent with hard shell case. Very good condition! \$1150.00 209-351-0631

PETS & SUPPLIES

Two CATS-FREE to loving home. ~5yr old Brn/blk tiger brothers, DE-CLAWED + NEUTERED. Very loving & Good with children. food+supplies can come with. 925-449-5650

Found an adorable grey kitten with white paws last night (7/25) and cannot keep him. Looking for a good home for the young fella. Reply ASAP. 209-406-5510

Cat 10 months old, male, neutered, all shots, box trained, smokey grey. We have to many to keep him. Will bring to your home. 209-874-3724

AKC Registered Labrador Puppies. Choclate and Black available 8/22 males \$400 females \$500 209-388-1811

RECREATION EQUIPMENT

12 volt RV trailer tongue jack \$25.00 925-447-5459

RIDESHARING

Express your commute, call 2-RIDE for more information or visit <http://www-r.llnl.gov/tsmp>.

stockton - Iam looking for 1 or 2 persons to carpool from stockton (march lane)my schedule is 6:30 to 4:00 pgr;00154 ext. 3-0475 209-954-1703

Modesto - 8:00 - 4:20 work schedule. Captain chairs, reading lights, etc. Transportation pretax and option to help with driving and save more. 209-521-9047, ext. 2-5177

Modesto - Vanpool accepting riders. Work regular hours. We leave from Home Depot at 6:35 am and exit the Lab at 4:45 pm. 209-576-0217, ext. 2-7459

SERVICES

INTERIOR, EXTERIOR PAINTING, free estimates. Excellent workmanshp, 25 yrs exp. References. 510-537-7222

Faux painting, murals, trompe loeil, decorative painting, childrens fantasy rooms, fireplaces 925-461-5045

‘Facing cancer together’ is theme for awareness effort

The theme for this year’s Cancer Awareness Campaign is “Facing Cancer Together,” which stems from a James Baldwin quote “Not everything that is faced can be changed, but nothing can be changed until it is faced.”

We recognize that those of us who face cancer rarely are alone and that by sharing information about prevention and treatment options, we can help each other avoid or survive the cancer experience. This is the foundation of our Cancer Awareness Campaign mission.

Once again we offer a variety of topics and events for LLNL and Sandia employees to educate and inspire healthy lifestyle practices and regular preventative check ups. Our target audience is not only employees who feel they need to know this information for themselves, but also employees who can help encourage their family and friends to learn from the information provided. There will be cancer brochures and flyers at every event along with sales of Lance Armstrong Foundation “Live Strong” wrist bands. Our events this year include the following:

Cancer Awareness Campaign Memorial Walk : (Aug. 3, noon to 1 p.m. Starts in front of Bldg. 361 and continues around the central basin.) Please join us as we take a walk in honor of those who have survived cancer and in memory of those who have not. Free teddy bears for all walkers.

Healthy Lifestyles to Defeat Cancer: (Aug. 9, noon to 1 p.m., Bldg. 482 auditorium.) “Active for Life,” a fitness and nutrition program designed by the American Cancer Society (ACS), will be shared to help people prevent cancers that are related to obesity. Kristen Ogdon of ACS will present information about obesity and statistics correlating it to cancer.

Colon Cancer Prevention and Treatment: (Aug. 24, noon to 1 p.m., Sandia’s CRF auditorium.) Pleasanton oncology surgeon Dat Tien Nguyen M.D. will present information regarding causes of colon cancer and recommendations for dietary practices to prevent it. He will also share recent medical advances in colon cancer treatment.

Cancer Awareness Film Festival: (Aug. 30 - Sept. 2, LLNL TV) Stay tuned for programs from past LLNL and SNL Cancer Awareness Campaign speakers Dr. Susan Love and Dr. Ernie Bodai as well as videos about the American Cancer Society programs and fundraisers. Each day a new program will air at 4 and



10 a.m., noon, 2, 4 and 8 p.m. Watch *Newsline* and LLNL TV for titles of programs during the week.

Breast Health Seminar: (Sept. 7, noon to 1 p.m., Bldg. 543 auditorium) Sandra Ja’chim, nurse practitioner, will provide a self-help demonstration for women to detect breast cancer early. She will have prosthetic breast samples of what cancerous lumps feel like. Ronna Oelrich, LLNL employee, along with Gayle Allen and Joanne Lombardi, SNL employees, will also share their breast cancer survival stories.

Prostate Cancer Awareness: (Sept. 13, noon to 1 p.m., Bldg. 482 auditorium.) Al Diggs, a dynamic speaker, American Cancer Society volunteer and prostate cancer survivor, will share information about prostate cancer and how to detect it early. Diggs points out the vast difference between the prostate cancer detection rate between African American men versus

Caucasian men. He strongly encourages wives and daughters to also attend his presentation so they can influence the men in their lives to get checked early. Prostate cancer is 100 percent curable, if detected early.

Health and Safety Fair: (Sept. 15, 11 a.m.-1:30 p.m., Bldg. 663 triage area.) Look for our booths at the annual fair to learn more about our campaign, the American Cancer Society’s programs, skin cancer prevention by Kaiser Permanente and other information about prevention, detection and treatment of cancer. Free chair massage provided courtesy of Sandia National Lab.

The Healing Companion: (Sept. 21, noon to 1 p.m., Bldg. 361 auditorium.) Dr. Jeff Kane of the Grass Valley Cancer Center offers a presentation based on his book titled, *The Healing Companion: Simple and Effective Ways Your Presence Can Help People Heal*. Through stories filled with compassion, wisdom and gentle humor, Kane shows us how to help others heal using one simple tool — our presence.

For more information on the following events and activities, contact one of the Cancer Awareness Campaign co-chairs: Cathy Kaplan, 3-6555, or Mark Costalla, 2-8999.

Daffodil Days campaign earns cancer society award

Nadine Horner and Kirsten Sprott, of the Lab’s Public Affairs Office and co-chairs of this year’s American Cancer Society Daffodil Days campaign accepted a “Special Recognition” award on behalf of the Laboratory, given by the cancer society’s Greater Bay Area/Redwood Empire Region.

The award acknowledges the Lab as the top fundraiser this year in the Greater Bay Area. Lab employees helped raise more than \$30,000 with the purchase of daffodils last March. Horner said, “It’s the work of the employ-



ees and all the representatives throughout the Lab who took the orders, collected money, and delivered the flowers. We could not have done it without them.”

Sprott echoed the sentiments adding, “The representatives were phenomenal. They had such enthusiasm. They rallied their co-workers to contribute.”

In addition, Horner thanks JerriAnn Gordillo-Marty, Branch Manager of UNCLE Credit Union, who oversaw the counting of the contributions.

Lawn service, Livermore area, reasonable, competitive and reliable, call for free estimate by week or month. 925-784-5483

Mobile custom installation for autos, boats, etc. Specializing in audio, video and tower boxes. 925-348-5198

SHARED HOUSING

Livermore, CA - \$495/mo. - FREE T1, Dish TV, In-House Laundry, etc. 415-871-6162

Pleasanton - Beautiful clean room in large townhome, private bath and walk in closet 925-461-5045

TRUCKS & TRAILERS

1991 - Chevy K1500 44in. Monster Mudders, 18in.Lift, 350-V8, Turbo 400 AT, New Seat Covers, Complete Service, Great Cond. \$9250/Offer/Trade 925-548-0596

1999 - Flat bed, dual axel tilt trailer with folding side rails. Custom built for Helicopter but can be used for jet skis or ATVs. \$600 OBO. 209-833-6452

1996 - Ford Ranger XLT, extra cab, good running, bedliner,long bed, security system, cassette. Nice little work truck 5,250.00 OBO 510-537-7222

2002 - Travel Trailer, 28ft. Cascade by Coachman w/pop-out. Fully Loaded, excellent condition. \$10K or b.o. 209-814-6769

1997 - Chevy PU white 4X4 Z71 ext cab 3rd door,runs great. Bed Cap and liner, cold A/C leather,nerf bars,billet grill. 160K freeway miles \$8500 209-968-9236

VACATION RENTALS

Tahoe cabin for rent 2 blocks from Heavenly. Sleeps approx 8 adults. \$400/wk, 200/wknd. 925-240-1615

SOUTH LAKE TAHOE - 3 Bedroom 2 Bath Chalet, nicely furnished, quiet area, park with Lake, tennis, etc., Great for family vacation. RESERVE NOW! 209-599-4644

Soooo cute beach cottage in Santa Cruz, near boat harbor. 2 bedr, 2bath, spa. 4 blks to ocean. Plan for gorgeous weather in fall. 925-245-1114

Arnold - Cozy 4 bdrm., 2 bath mountain house near Big Trees Park on hwy 4 - Lakes, streams, hiking. Sun - Thurs \$75/night-\$600/week. 925-245-1114

Gualala (Mendocino Coast) - Stunning whitewater ocean views, 2bd/2ba vacation home w/ deck, bbq & hottub. Walk to town, shops, restaurants & spa. 925-606-1845

MAUI - 1 year house exchange. Perfect opportunity to see what it is like to live in paradise for longer than a short vacation. 925-429-4003

Maui, HI - Kahana Reef

oceanfront 1BR/1BA condominium. Beautiful two-island view, oceanside pool, and BBQs. LLNL rates for year-round reservations. 925-449-0761

California, NV, Oregon, you choose, - Use week by end of Feb 2006. Call for potential locations in the US or world. min \$725/week, max \$825/week 2 bedroom. 925-449-6048

Disneyland for pre-Christmas, - 12/17-24/05, 1 bedroom condo, sleeps 4, full kitchen, 3 night minimum @ \$110/night or \$700/week prices includes tax, so no hidden fees. 925-449-6048

WANTED

Refrigerator/freezer, 18 cu. ft., or less, cheap, for college student apartment. 925-846-1453

Air compressor wanted for general garage/shop use. 925-455-6785

PE teacher needs any recreational equipment. Baseball bats, gloves, rackets, golf clubs, ect. Willing to pick up. 209-634-9438

Keyboard and/or acoustic guitar for college student to learn and practice songs for youth group. Thank you. 209-545-6892

We are looking for a small condo or small studio to rent in Honolulu for 2. Low rate for Dec. 24 to Jan 14. Dates are open. 510-537-7222

Previously owned tennis balls. Have new machine and need practice balls. 925-245-1114

Wanted - Gerber variable scale. Remember these? They look sort of like a slide rule, but can be used for scaling maps and plots. 209-836-5764

Hot Wheels, from 60s, 70s, and 80s. In package or opened. 925-325-1123

AMAZON
Continued from page 1

that the huge amount of carbon dioxide returning to the atmosphere is much younger than the carbon remaining in the rivers and being carried downstream,” Brown said. “These new measurements tell us that the basin isn’t sequestering carbon for as long as we once thought.”

Carbon is carried by rains and groundwater into waterways from soils, decomposing woody debris, leaf litter and other organic matter. Once in waterways, it is chewed up by microorganisms, insects and fish. The carbon dioxide they generate quickly returns to the atmosphere, some 500 million tons a year, an amount equal to what is absorbed each year by the Amazonian rainforest.

“With this single study, we more than doubled the number of existing river radiocarbon measurements,” said Carrie Masiello, a former Laboratory postdoc and now an assistant professor in earth science at Rice University. “We were fortunate to have access to the DOE’s accelerator mass spectrometer at Lawrence Livermore because it’s one of only a few in the world that have the capability of making radiocarbon measurements this precisely.

“We had some sleepless nights generating this volume of data, but we needed to scale up to get a new view of how rivers interact with the atmosphere,” she said.

The carbon 14 measurements were supported by the LLNL University Relations



STROUD WATER RESEARCH CENTER

Accurate sampling requires water from the middle of rivers. In this case, researchers take advantage of a stone bridge built by the Spaniards during the colonial period before the 19th century to collect samples from a high Andes river in Peru.

Program/CAMS program to promote interactions between Lab and university

researchers. “One of the most exciting parts of this work was the opportunity provided by the URP/CAMS support to bring top-tier university graduate students to the Lab to attack questions of international significance,” Brown said.

The Lab support for the carbon 14 measurements permitted the two graduate student lead authors of the paper to come to the Lab and participate directly in the preparation and measurement of the CAMREX samples using the AMS systems at Livermore.

“River breath is much deeper and faster than anyone realized,” said co-author Jeff Richey, a University of Washington oceanographer.

Study samples were collected by Richey’s research group and Brazilian scientists on expeditions going back as far as 1991.

“Having established that the amount of carbon outgassing is much greater than anyone imagined, the issue then becomes, where does it come from,” said Emilio Mayorga, lead author of the paper and a University of Washington oceanographer. “If it’s young, that indicates the carbon pool is dynamic, which could make the system much more reactive to deforestation and climate change.”

For example, data from a region of active deforestation in the southern Amazon already shows that the carbon leaving rivers has an identifiable isotopic signature of pasture grasses.

“You’re changing the land use, changing vegetation and other conditions,” Mayorga said. “In terms of what’s being respired, the system is responding fairly quickly. Human and natural systems, in turn, will be impacted.”

University of Washington writer Sandra Hines contributed to this report.

AURORA
Continued from page 1

how we move forward toward our 2025 vision.”

The five Aurora teams are: Missions &

Sponsors; Science & Technology; Operations & Infrastructure; Partnerships & Relationships; or Workforce & Work Environment.

On Tuesday, proposed initiatives were presented to five red teams made up of project members. Questions and critiques received during these

sessions were used by presenters to perfect presentation of the proposed initiatives for Thursday’s final session when the initiatives were ranked.

Additional coverage of the results of the two-day offsite will appear in upcoming editions of *Newsline* and *NewsOnLine*.

Lab publications honored



MICHAEL ANTHONY/TID

Three of the Laboratory’s technical publications took top honors from the 2004 Society of Technical Communication international competition. The *2003 Chemistry and Materials Science Annual Report* won a Distinguished Technical Communication Award, the highest honor, in the annual report category. Its contributors, pictured with Tomas Diaz de la Rubia (far right), associate director for CMS, include Michael Anthony, Linda Null, Stephanie Shang, George Kitrinis (from left, second row) and Gabriele Rennie and Louisa Cardoza (front row). Two other publications, the CMS Careers recruitment brochure and the Lab’s *Science and Technology Review*, each won an Excellence Award.



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